

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A process for separating mixtures of isomeric pentenenitriles, in which at least one isomer is depleted from the mixture, which comprises effecting the separation of the mixtures of isomeric pentenenitriles selected from the group consisting of

- mixtures comprising 2-methyl-3-butenitrile and 3-pentenenitrile,
 - mixtures comprising 2-methyl-3-butenitrile and (Z)-2-methyl-2-butenitrile,
 - mixtures comprising cis-2-pentenenitrile and 3-pentenenitrile and
 - mixtures comprising (E)-2-methyl-2-butenitrile and 3-pentenenitrile
- ~~distillatively~~ by distilling under a pressure of from 0.001 to 1 bar.

2. (Original) The process according to claim 1, wherein at least two different isomers are separated.

3. (Currently amended) The process according to ~~either of claims 1 and 2~~ claim 1, wherein the mixture comprises 2-methyl-3-butenitrile and 3-pentenenitrile and ~~stems is~~ produced from a reaction of 1,3-butadiene with hydrogen cyanide over a hydrocyanation catalyst.

4. (Original) The process according to claim 3, wherein the proportion of 2-methyl-3-butenitrile in the mixture is from 0.1 to 99.9% by weight, based on the sum of all pentenenitrile isomers in the mixture, and/or the proportion of 3-pentenenitrile in the mixture is from 0.1 to 99.9% by weight, based on the sum of the pentenenitrile isomers in the mixture.

5. (Currently amended) The process according to ~~either of claims 1 and 2~~ claim 1, wherein the mixture comprises 2-methyl-3-butenitrile and (Z)-2-methyl-2-butenitrile and ~~stems is produced~~ from an isomerization of 2-methyl-3-butenitrile.

6. (Original) The process according to claim 5, wherein the proportion of 2-methyl-3-butenitrile in the mixture is from 0.1 to 99% by weight, based on the sum of the pentenenitrile isomers in the mixture, and/or the proportion of (Z)-2-methyl-2-butenitrile in the mixture is from 0.1 to 99% by weight, based on the sum of the pentenenitrile isomers in the mixture.

7. (Currently amended) The process according to ~~either of claims 1 and 2~~ claim 1, wherein the mixture comprises cis-2-pentenitrile and 3-pentenitrile and ~~stems~~ is produced from a reaction of 3-pentenitrile with hydrogen cyanide over a hydrocyanation catalyst.

8. (Original) The process according to claim 7, wherein the proportion of cis-2-pentenitrile in the mixture is from 0.1 to 99.9% by weight, based on the sum of pentenitrile isomers in the mixture, and/or the proportion of 3-pentenitrile in the mixture is from 0.1 to 99.9% by weight, based on the sum of the pentenitrile isomers in the mixture.

9. (Currently amended) The process according to ~~either of claims 1 and 2~~ claim 1, wherein the mixture comprises (E)-2-methyl-2-butenitrile and 3-pentenitrile and ~~stems~~ is produced from a reaction of 1,3-butadiene with hydrogen cyanide over a hydrocyanation catalyst or from the isomerization of 2-methyl-3-butenitrile or from a reaction of 3-pentenitrile with hydrogen cyanide over a hydrocyanation catalyst.

10. (Original) The process according to claim 9, wherein the proportion of 3-pentenitrile in the mixture is from 0.1 to 99.9% by weight, based on the sum of the pentenitrile isomers in the mixture, and/or the proportion of (E)-2-methyl-2-butenitrile in the mixture is from 0.1 to 99.9% by weight, based on the sum of the pentenitrile isomers in the mixture.

11. (New) The process according to claim 2, wherein the mixture comprises 2-methyl-3-butenitrile and 3-pentenitrile and is produced from a reaction of 1,3-butadiene with hydrogen cyanide over a hydrocyanation catalyst.

12. (New) The process according to claim 2, wherein the mixture comprises 2-methyl-3-butenitrile and (Z)-2-methyl-2-butenitrile and is produced from an isomerization of 2-methyl-3-butenitrile.

13. (New) The process according to claim 2 wherein the mixture comprises cis-2-pentenitrile and 3-pentenitrile and is produced from a reaction of 3-pentenitrile with

hydrogen cyanide over a hydrocyanation catalyst.

14. (New) The process according to claim 2, wherein the mixture comprises (E)-2-methyl-2-butenitrile and 3-pentenitrile and is produced from a reaction of 1, 3-butadiene with hydrogen cyanide over a hydrocyanation catalyst or from the isomerization of 2-methyl-3-butenitrile or from a reaction of 3-pentenitrile with hydrogen cyanide over a hydrocyanation catalyst.